

COUNTRY ANALYSIS BRIEFS

South China Sea

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Background

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The South China Sea is rich in natural resources such as oil and natural gas and ownership of virtually all of the South China Sea, including the Gulf of Thailand, is contested.

The South China Sea encompasses a portion of the Pacific Ocean stretching roughly from Singapore and the [Strait of Malacca](#) in the southwest, to the Strait of Taiwan (between Taiwan and China) in the northeast. The area includes more than 200 small islands, rocks, and reefs, with the majority located in the Paracel and Spratly Island chains. Many of these islands are partially submerged islets, rocks, and reefs unsuitable for habitation and are little more than shipping hazards, with the total land area of the Spratly Islands encompassing less than 3 square miles. The islands are important for strategic and political reasons, however, as claims of ownership are used to bolster claims to the surrounding sea and its resources. The Gulf of Thailand borders the South China Sea, and though technically not part of it, disputes surround ownership of the Gulf and its resources as well.



The South China Sea is rich in natural resources such as oil and natural gas, but ownership of the resources is in dispute. Asia's robust economic growth has boosted demand for energy in the region. According to EIA estimates, [oil consumption in developing Asian countries](#) is expected to rise by 2.7 percent annually from about 14.8 million barrels per day (MMbbl/d) in 2004 to nearly 29.8 MMbbl/d by 2030. China is expected to account for almost half the growth.

The United Nations Convention on the Law of the Sea ([UNCLOS](#)) has not yet resolved ownership disputes in the South China Sea. The 1982 convention created a number of guidelines concerning the status of islands, continental shelves, exclusive economic zones (EEZ), enclosed seas, and territorial limits. UNCLOS states that countries with overlapping claims must resolve them by good faith negotiation.

South China Sea Territorial Issues

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Competing territorial claims over the South China Sea and its resources are numerous.

Competing territorial claims over the South China Sea and its resources are numerous, with claims for various areas by Brunei, Cambodia, China, Indonesia, Malaysia, the Philippines, Taiwan, Thailand, and Vietnam. The UN Convention on the Law of the Sea ([UNCLOS](#)) provides for claims to areas of the ocean to be made using a 200 mile Exclusive Economic Zone (EEZ) and/ or the continental shelf principle.

Claims by Country				
Country	South China Sea	Spratlly Islands	Paracel Islands	Gulf of Thailand
<i>Brunei</i>	UNCLOS	no formal claim	no	n/a
<i>Cambodia</i>	not applicable (n/a)	n/a	n/a	UNCLOS
<i>China</i>	all*	all	all	n/a
<i>Indonesia</i>	UNCLOS	no	no	n/a
<i>Malaysia</i>	UNCLOS	3 islands	no	UNCLOS
<i>Philippines</i>	significant portions	8 islands	no	n/a
<i>Taiwan</i>	all*	all	all	n/a
<i>Thailand</i>	n/a	n/a	n/a	UNCLOS
<i>Vietnam</i>	all*	all	all	UNCLOS
*excluding buffer zone along littoral states (calculations for buffer unknown)				

Brunei – Brunei’s claim to the South China Sea is limited to its EEZ, which extends to one of the southern reefs of the Spratlly Islands. However, Brunei has not made any formal claims to the reef nor to any of the Spratllys. Brunei makes no claims towards any of the Paracel Islands.

Cambodia – Cambodia claims portions of the Gulf of Thailand based upon its EEZ and the continental shelf principle, as well as its history in the Gulf. In 1982, Cambodia signed The Agreement on Historic Waters with Vietnam, setting the stage for later cooperation between the two countries. In 2006, Cambodia and Vietnam announced their intention to share the oil resources of the Gulf of Thailand. Cambodia has no such agreements with either Thailand or Malaysia.

China – China claims almost all of the South China Sea. China claims all of the Spratlly Islands (Nansha Islands in Chinese), and occupies several of the islands with its military. In 1974, China seized the Paracel Islands from Vietnam and continues to maintain sovereignty over the islands. Additionally, China claims the Pratas Islands. China’s claims to the South China Sea are based on the EEZ and continental shelf principle as well as historical records of the Han (110 AD) and Ming (1403-1433 AD) Dynasties.

Indonesia – Indonesia’s claim to the South China Sea is limited to the boundaries of the EEZ and continental shelf. Indonesia claims neither the Spratlly nor the Paracel Islands.

Malaysia – Malaysia’s claim to the South China Sea is limited to the boundaries of the EEZ and continental shelf. Malaysia claims three islands of the Spratllys, having built a hotel on one and bringing soil from the mainland to raise the level of another. Malaysia makes no claim to the Paracel Islands. Malaysia also claims portions of the Gulf of Thailand, based upon its EEZ and the continental shelf principle. Malaysia signed a cooperative agreement for exploration and development with Thailand in 1979. In 1992, Malaysia and Vietnam signed a Joint Development Areas agreement. Malaysia has no such agreement with Cambodia.

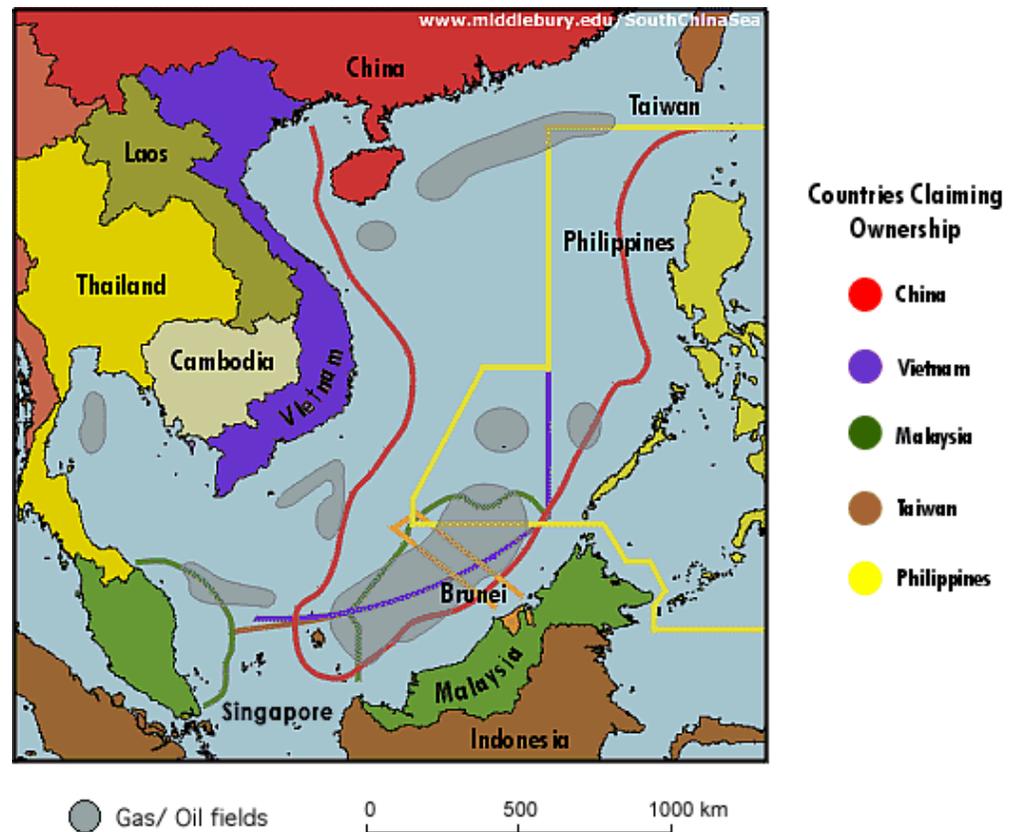
Philippines – The Philippines claim a sizeable portion of the South China Sea. The Philippines occupy eight of the Spratlly Islands (Kalayaan in Filipino). The Philippines do not claim the Paracel Islands. Filipino claims are based upon the EEZ and continental shelf principle, as well as a 1956 Filipino explorer’s expedition.

Taiwan – Taiwan claims almost all of the South China Sea. Taiwan claims all of the Spratlly Islands (Nansha Islands in Chinese) and has announced its intention to build an airstrip on Taiping. Taiwan claims all of the Paracel Islands. Additionally, Taiwan occupies the Pratas Islands. Taiwan’s claims are based on principles similar to those of China.

Thailand – Thailand claims the Gulf of Thailand based upon its EEZ and the continental shelf principle. Thailand signed a cooperative agreement for exploration and development with Malaysia in 1979. In 1997, Thailand and Vietnam signed an agreement setting the delimitation of their respective sea boundaries. Thailand has no agreements with Cambodia.

Vietnam – Vietnam claims a significant portion of the South China Sea based upon its EEZ and the continental shelf principle. Vietnam claims all of the Spratlly Islands (Truong Sa in Vietnamese), and has occupied twenty of them. Vietnam claims all of the Paracel Islands (Hoang Sa in Vietnamese) despite

being forcibly ejected by China in 1974. Vietnam also claims the Gulf of Thailand based upon its EEZ and the continental shelf principle. In 1982, Vietnam signed The Agreement on Historic Waters with Cambodia, setting the stage for later cooperation between the two countries. In 2006, Vietnam and Cambodia announced their intention to share the oil resources of the Gulf of Thailand. In 1992, Vietnam and Malaysia signed a Joint Development Areas agreement. In 1997, Vietnam and Thailand signed an agreement setting the delimitation of their respective sea boundaries.



Regional Conflict and Resolution

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Though South China Sea claimants clash intermittently, resolution efforts are underway

In addition to the threat of piracy or the use of force to maintain control over areas by South China Sea (SCS) claimants, the SCS has a history as a hotspot for violence. Fishing boats from one country are harassed by other claimants, occasionally resulting in civilian fatalities. Companies permitted to explore for oil and natural gas by one country have been denied access to disputed areas by armed ships of other claimants. Military skirmishes are not unknown in the SCS, the most serious having occurred between China and Vietnam. In 1974, China invaded and captured the Paracel Islands from Vietnam. In 1988, 70 Vietnamese sailors died when China sunk several Vietnamese ships in a confrontation at Johnson Reef in the Spratly Islands. Click [here](#) for a summary of military clashes in the SCS since 1970.

The Association of Southeast Asian Nations (ASEAN) has emerged as an important forum for dialogue amongst South China Sea claimants. Though ASEAN does not include China and Taiwan, a number of working groups with China and Taiwan have been held on issues with the potential to foster the relationships necessary to resolve the more contentious issues in the region. Indonesia hosted the first dialogue workshop in 1990 and has since taken a leading role in diplomatic initiatives and cooperative agreements to resolve SCS issues.

In 1996, ASEAN ministers agreed to the need for a regional code of conduct for the SCS that would permit activities such as scientific research, combating piracy, and thwarting drug trafficking without invoking the issue of sovereignty. In 1999, a Vietnamese and Filipino draft for a general code of conduct was put forward at the ASEAN Summit. In November 2002, China and the 10 ASEAN members signed a Joint Declaration on the Conduct of Parties, pledging to "undertake to resolve their territorial and jurisdictional disputes by peaceful means" without "resorting to the threat or the use of

force.”

The ASEAN Regional Forum (ARF; 22 countries involved in the security of the Asia Pacific region, including all ASEAN members) has held discussions on SCS issues. China, an ARF member, has argued in the past that the resolution of territorial disputes should be a bilateral issue. Other ARF members, such as the United States, have argued that all ARF members have an interest in issues affecting the peace and stability of the region, and that the ARF forum was appropriate for discussing these issues. Malaysian Foreign Minister Syed Hamid bin Syed Jaafar Albar has stated his belief that ASEAN territorial issues were matters for ASEAN discussion, not other international forums.

In December 2000, bilateral group meetings between Vietnam and China resolved Gulf of Tonkin (Beibu Wan in Chinese; Vinh Bac Bo in Vietnamese) boundary issues. Vietnam had wanted to include the dispute over the Paracel Islands in any “code of conduct”, but the idea was not supported by other ASEAN members as the Paracels are disputed only amongst Vietnam, China, and Taiwan. In 2007, joint patrols of the Gulf of Tonkin were conducted by China and Vietnam.

Malaysia and Brunei held talks in 2003 regarding their conflicting EEZ claims, but have yet to reach an agreement. In 2003, naval vessels from Malaysia and Brunei acted (without the actual use of force) to prevent exploration vessels from working in the disputed area.

Since 2005, China (via China National Offshore Oil Corporation, CNOOC), the Philippines (via The Philippine National Oil Company), and Vietnam (via PetroVietnam) have worked together to conduct seismic surveys in a 55,000 square mile area including the Spratly Islands. The \$15 million project cost has been shared by the three companies and an “unprecedented” level of information sharing has occurred amongst the national companies. In April of 2007, China National Petroleum Corporation, China Petroleum & Chemical Corporation, and CNOOC announced plans to begin drilling exploratory wells in the waters surrounding the Spratlys in early 2008.

Oil & Natural Gas

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Oil receives the most attention though natural gas could be the most abundant hydrocarbon resource in the South China Sea

Oil

The focus of most attention regarding the South China Sea's (SCS) resources has been on hydrocarbons, especially oil. Oil reserve estimates for the entire SCS region vary. One Chinese estimate suggests potential oil resources as high as 213 billion barrels of oil (bbl). A 1993/1994 estimate by the U.S. Geological Survey estimated the sum total of discovered reserves and undiscovered resources in the offshore basins of the SCS at 28 billion bbl.

The fact that surrounding areas are rich in oil deposits has led to speculation that the Spratly Islands could be an untapped oil-bearing province. There is little evidence outside of Chinese claims to support the view that the region contains substantial oil resources. One of the more moderate Chinese estimates suggested that potential oil resources (not proved reserves) of the Spratly and Paracel Islands could be as high as 105 billion bbl. Due to the lack of exploratory drilling, there are no proven oil reserve estimates for the Spratly or Paracel Islands.

Natural Gas

Natural gas might be the most abundant hydrocarbon resource in the SCS. Most of the hydrocarbon fields explored in the SCS regions of Brunei, Indonesia, Malaysia, Thailand, Vietnam, and the Philippines contain natural gas, not oil. Estimates by the U.S. Geological Survey and others indicate that about 60 to 70 percent of the region's hydrocarbon resources are natural gas.

As with oil, estimates of the SCS' natural gas resources vary widely. One Chinese estimate for the entire SCS estimates natural gas reserves to be 2 quadrillion cubic feet. Another Chinese report estimates 225 billion barrels of oil equivalent in the Spratly Islands alone. If 70 percent of these hydrocarbons are gas as some studies suggest, total gas resources (as opposed to proved reserves) would be almost 900 trillion cubic feet (Tcf). In April 2006, Husky Energy working with the Chinese National Offshore Oil Corporation announced a find of proven natural gas reserves of nearly 4 to 6 Tcf near the Spratly Islands.

Production

Field ownership is an important point to be clarified prior to production in any area of the world (please refer to [South China Sea Territorial Issues](#) for an overview, or click [here](#) for a map detailing fields and boundary disputes). Despite the contested nature of the SCS, production is being undertaken by the following countries:

Indonesia: claims the natural gas-rich fields offshore of the Natuna Islands. As of 2008, the fields are estimated to have close to 46 Tcf of recoverable reserves. Indonesia's claim was undisputed until China released an official map with unclear maritime boundaries indicating that Chinese-claimed waters in the South China Sea may extend into the waters around the Natuna Islands. Indonesia responded in 1996 by holding large military exercises in the Natuna Islands region. Since then, Indonesia has begun major natural gas production in the Natuna area without China voicing any objection. Indonesia has been exporting Natuna gas to Singapore's Jurong island via a 400-mile undersea pipeline since 2001.

Philippines: The Filipino Malampaya and Camago fields are in waters claimed by China. Both fields are estimated to contain a combined amount of 2.3 to 4.4 Tcf of natural gas reserves. The Philippines has proceeded with development of the fields and linked the gas output to three power plants via a 312-mile pipeline. There have been no objections from China regarding this development. The Malampaya field has an estimated 150 million bbl of oil; as of January 2008, plans were underway to begin international bidding rounds for development of the field.

Malaysia: Many Malaysian natural gas fields located offshore Sarawak are also claimed by China, but to date, China has not specifically objected to their development. Discoveries of oil in 2002 and 2004 (by Murphy Oil and Shell Malaysia, respectively) off the coast of Sabah have contributed to the dispute between Malaysia and **Brunei** over offshore rights. Brunei had asserted a 200-mile exclusive economic zone (EEZ) off its coastline in 2000. Negotiations between the two governments to resolve the issue are ongoing.

Additional Tables & Map

Table 1

Military Clashes in the South China Sea* Since 1970		
Date	Countries	Military Action
1974	China, Vietnam	China seized the Paracels from Vietnam, with 18 of its troops killed in clashes on one of the islands.
1988	China, Vietnam	Chinese and Vietnamese navies clashed at Johnson Reef in the Spratlys. Several Vietnamese boats were sunk and over 70 sailors killed.
1992	China, Vietnam	Vietnam accused China of landing troops on Da Luc Reef. China seized almost 20 Vietnamese cargo ships transporting goods from Hong Kong from June - September.
1994	China, Vietnam	China and Vietnam had naval confrontations within Vietnam's internationally recognized territorial waters over Vietnam's Tu Chinh oil exploration blocks 133, 134, and 135. Chinese claim the area as part of their Wan' Bei-21 (WAB-21) block.
1995	China, Philippines	China occupied Philippine-claimed Mischief Reef. Philippine military evicted the Chinese in March and destroyed Chinese markers.
1995	Taiwan, Vietnam	Taiwanese artillery fired on a Vietnamese supply ship.
1996	China, Philippines	In January, Chinese vessels engaged in a 90-minute gun battle with a Philippine navy gunboat near the island of Capone, off the west coast of Luzon, north of Manila.
1997	China, Philippines	The Philippine navy ordered a Chinese speedboat and two fishing boats to leave Scarborough Shoal in April; the Philippine navy later removed Chinese markers and raised its flag. China sent three warships to survey the Philippine-occupied islands of Panata and Kota.
1998	Philippines, Vietnam	In January, Vietnamese soldiers fired on a Philippine fishing boat near Tennent (Pigeon) Reef.
1999	China, Philippines	In May, a Chinese fishing boat was sunk in a collision with Philippine warship. In July, another Chinese fishing boat was sunk in a collision with a Philippine warship.
1999	China, Philippines	In May, Chinese warships were accused of harassing a Philippine navy vessel after it ran aground near the Spratlys.
1999	Philippines, Vietnam	In October, Vietnamese troops fired upon a Philippine air force plane on reconnaissance in the Spratlys.
1999	Malaysia, Philippines	In October, Philippine defense sources reported that 2 Malaysian fighter planes and 2 Philippine air force surveillance planes nearly engaged over a Malaysian-occupied reef in the Spratlys. The Malaysian Defense Ministry stated that it was not a stand-off.

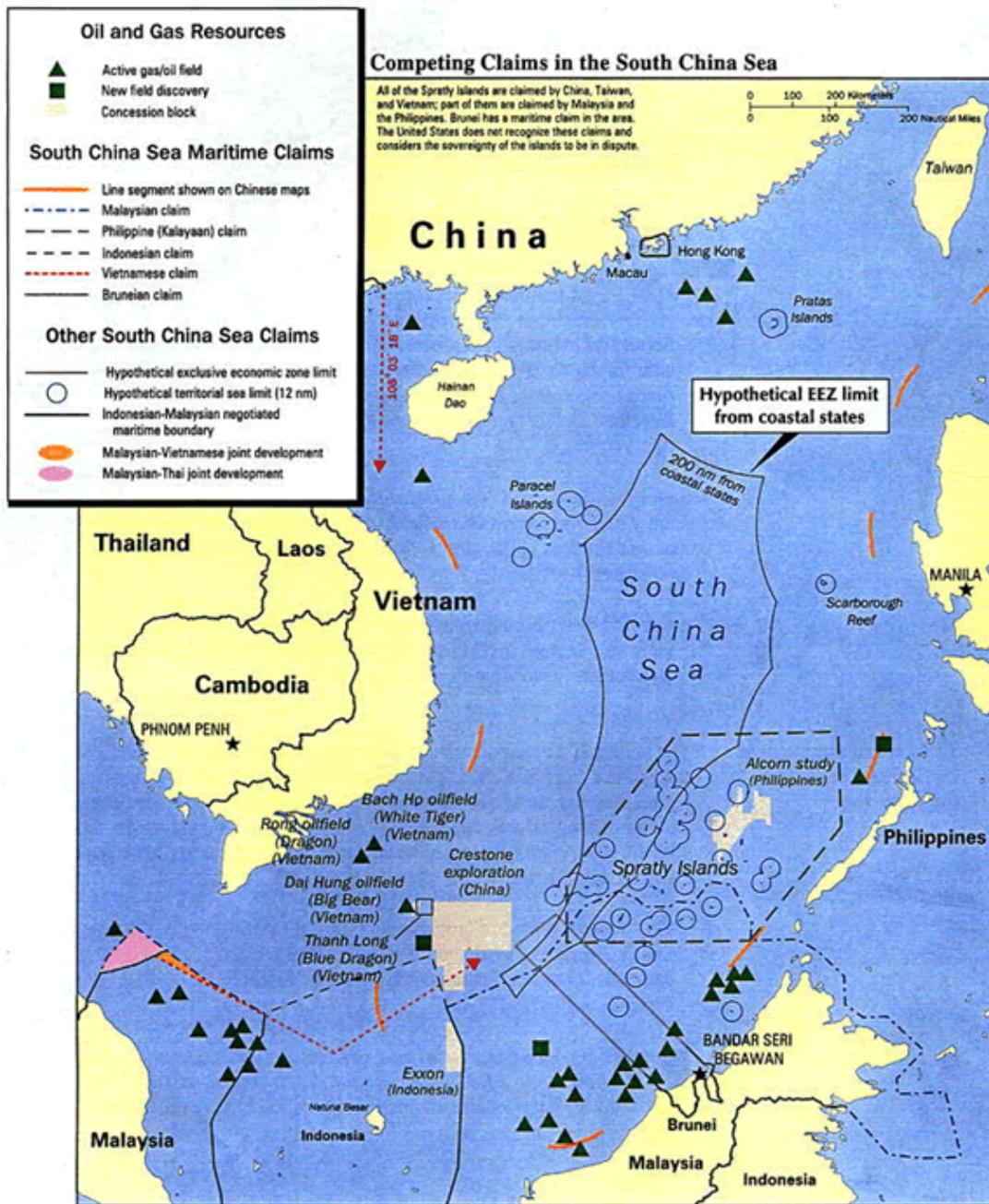
2000	China, Philippines	In May, Philippine troops opened fire on Chinese fishermen, killing one and arresting 7.
2001	China, Philippines	During first three months, the Filipino navy boarded 14 Chinese flagged boats, confiscated their catches, and ejected vessels out of contested portions of the Spratlys.
2001	China, Philippines	In March, the Philippines sent a gunboat to Scarborough Shoal to, "to ward off any attempt by China to erect structures on the rock".
2002	Philippines, Vietnam	In August, Vietnamese troops fired warning shots at Filipino military reconnaissance planes circling over the Spratlys.
<p><i>* The South China Sea is defined by the International Hydrographic Organization as the body of water stretching in a Southwest to Northeast direction, whose southern border is 3 degrees South latitude between South Sumatra and Kalimantan (Karimata Straits), and whose northern border is the Strait of Taiwan from the northern tip of Taiwan to the Fujian coast of China.</i></p>		

Table 2

Oil and Gas by Country of the South China Sea Region*				
Country	Proven Oil Reserves (Billion Barrels)	Proven Gas Reserves (Trillion Cubic Feet)	Oil Production (Thousand Barrels/Day)	Gas Production (Billion Cubic Feet/Day)
Brunei	1.1	13.8	203.5	366
Cambodia	0	0	0	0
China	16	80	3,684.4	1,960
Indonesia	4.37	93.9	892.5	2,613
Malaysia	4.0	83.0	750.8	2,218
Philippines	0.14	3.5	15.2	88
Singapore	0	0	0	0
Taiwan	<0.01	.22	1.0	28
Thailand	0.5	11.7	186.9	858
Vietnam	0.6	6.8	344.6	162
Total	26.7	279.1	6,078.9	8,293
<p><i>*All data is for the entire country. Note: Neither the Spratlys nor the Paracels have proven reserves. Proved oil and natural gas reserves are as of 1/01/2008. Oil production is a 2006 average. Oil supply includes crude oil, natural gas plant liquids, and other liquids. Natural gas production is a 2006 projection.</i></p>				

Map 1

Competing Claims in the South China Sea Region



Source: CIA Maps and Publications for the Public

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[Air University Library: Spratly Dispute](#)
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General Information

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